

CLAIMS

What is claimed is:

- 1 1. A system for testing JMX monitors, the system comprising:
  - 2 (a) a generator adapted to generate a signal;
  - 3 (b) a monitor adapted to monitor the signal; and
  - 4 (c) a notifier adapted to generate a notification in response to the
  - 5 monitoring of the signal by the monitor.
- 1 2. A system according to claim 1, further comprising a listener for  
2 receiving the notification.
- 1 3. A system according to claim 1, further comprising an interface  
2 adapted to allow entry of at least one parameter to be used in  
3 generating the signal.
- 1 4. A system according to claim 1, further comprising a source of at  
2 least one equation to be used in generating the signal.
- 1 5. A system according to claim 3, wherein said source is selected from  
2 the group consisting of data libraries, data files, application code, or  
3 user entry.

- 1      6.      A system according to claim 1, further comprising a timer, adapted  
2                      to control the time for testing.
- 1      7.      A system according to claim 1, wherein the monitor monitors the  
2                      signal at a frequency at least twice the frequency of the signal.
- 1      8.      A system according to claim 1, further comprising a processor  
2                      adapted to execute the generation of the signal.
- 1      9.      A signal generator comprising:  
2                      (a) a generator MBean adapted to generate a signal; and  
3                      (b) a library of equations for use in the generator MBean, each  
4                      equation representing a signal capable of being generated by the  
5                      generator MBean.
- 1      10.     A signal generator according to claim 8, further comprising an  
2                      interface adapted to allow selection of an equation from the library  
3                      to be used in generating the signal.

1 11. A signal generator according to claim 9, wherein the interface is  
2 further adapted to allow entry of at least one parameter to be used  
3 in the equation.

1 12. A system according to claim 8, further comprising a timer java bean,  
2 adapted to control the time for generation of the signal.

1 13. A method for generating a signal, the method comprising the steps  
2 of:

3 (a) selecting an equation from a library, the equation corresponding  
4 to the signal to be generated;

5 (b) specifying the appropriate parameters for the equation; and

6 (c) generating a signal corresponding to the equation with the  
7 parameters using a generator MBean.

1 14. A method according to claim 12, further comprising the step of  
2 specifying the length of time for generation of the signal.

1 15. A method for testing a JMX monitor, the method comprising the  
2 steps of:

3 (a) generating a signal using a generator MBean;

4 (b) polling the generator bean at a frequency at least twice the  
5 frequency of the generated signal using a monitor MBean of the JMX  
6 monitor; and

7 (c) returning a testing value for each polling of the generator MBean.

1 16. A method according to claim 15, further comprising the step of  
2 generating a notification when a threshold value of the testing signal  
3 is detected by the monitor.

1 17. A method according to claim 15, further comprising the step of  
2 storing the testing values to a data store.

1 18. A method according to claim 15, further comprising the step of  
2 comparing each testing value to the corresponding value of the  
3 signal from the generator MBean.

1 19. A method according to claim 15, further comprising the step of  
2 specifying an equation to be used in generating the signal.

1      20.    A method according to claim 15, further comprising the step of  
2           specifying at least one parameter to be used in generating the  
3           signal.

1      21.    A method according to claim 15, further comprising the step of  
2           specifying the frequency of polling.

1      22.    A computer-readable medium, comprising:  
2           (a) means for selecting an equation from a library, the equation  
3                  corresponding to a signal to be generated;  
4           (b) means for specifying parameters for the equation; and  
5           (c) means for generating a signal corresponding to the equation,  
6                  with the parameters, using a generator MBean.

1      23.    A computer program product for execution by a server computer for  
2           testing a JMX monitor, comprising:  
3           (a) computer code for selecting an equation from a library, the  
4                  equation corresponding to a signal to be generated;  
5           (b) computer code for specifying parameters for the equation; and  
6           (c) computer code for generating a signal corresponding to the  
7                  equation, with the parameters, using a generator MBean.

- 1       24.    A system for testing a JMX monitor, comprising:
- 2           (a) means for selecting an equation from a library, the equation
- 3                 corresponding to a signal to be generated;
- 4           (b) means for specifying parameters for the equation; and
- 5           (c) means for generating a signal corresponding to the equation,
- 6                 with the parameters, using a generator MBean.

- 1       25.    A computer system comprising:
- 2           a processor;
- 3           object code executed by said processor, said object code configured
- 4       to:
- 5           (a) select an equation from a library, the equation
- 6                 corresponding to a signal to be generated;
- 7           (b) specify parameters for the equation; and
- 8           (c) generate a signal corresponding to the equation, with the
- 9                 parameters, using a generator MBean.